

CASE STUDY

Rice Dryer

PRODUCERS RICE INSTALLS ITS FIRST-EVER 10,000-BPH UNIT AT TYRONZA, AR



rice from drying too hot aren't worth much. Most rice handlers run rice through at least two passes, and three or four passes is not uncommon, depending on the year and the moisture level of incoming rice.

Taken altogether, 10,000 bushels of rice dried in one hour is a tremendous volume of grain. And in the spring and summer of 2007, **Producers Rice Mill Inc.** installed its very first 10,000-bph dryer at its 1.6-million-bushel elevator along U.S. Highway 63 in Tyronza, AR (870-487-2300). The dryer was manufactured by **The GSI Group**, Assumption, IL (800-800-5329).

Replacement for a Bottleneck

The GSI dryer replaces an older 6,000-bph unit. With the Tyronza facility handling more than 2 million bushels of rice per year, the older dryer had become a bottleneck, says **Kevin McSwain**, project manager for Producers Rice.

Dion Etter, another Producers project manager who worked on the Tyronza dryer installation, says the new dryer is the company's third from GSI, the other two are other locations. "It's

compatible with a lot of other column-type dryers," he says, "but we like the way the GSI PLC is set up for easy startup. The GSI dryers also do a good job on energy consumption."

Because the Tyronza dryer is so new, Etter didn't have numbers yet on its energy performance. The dryer is powered from a pipe off a gas main running along a Burlington Northern Santa Fe main line that serves the elevator.

Construction began in March, with **Precision Construction**, Bald Knob, AR (501-724-2728), serving as general contractor.

McSwain notes that the new dryer fit into the space occupied by the older dryer, but because of its height, a pair of existing wet and dry legs had to be boosted some 30 feet in height to accommodate the GSI dryer.

When *Grain Journal* visited Tyronza in mid-August, rice harvest had not gotten underway in the area, but Producers Rice had done a test run of 6,000 bushels of rice that had been trucked in. The performance had been very good, Etter comments.

Ed Zdrojewski, editor

New 10,000-bph GSI rice dryer installed between March and July 2007 at Producers Rice Mill Inc.'s grain elevator at Tyronza, AR. Photos by Ed Zdrojewski.

Let's put a figure like 10,000 bph in perspective.

When it comes to drying rice, that's approximately 6,000 of the traditional 100-lb. bags in an hour.

Consider then that rice must be dried slowly, at a relatively low temperature, because broken kernels of



Key Producers Rice personnel, from left: Dion Etter, project manager; Kevin McSwain, project manager; Linda Hood, office manager; Dale Inman, superintendent; and Melvin Herring, location manager.